Hydrologic Services Manual

WSOM Chapter E-24

Each WFO must have a Hydrologic Services Manual (HSM) which describes in detail the hydrologic services rendered by the office. The Hydrology Program Manager (HPM) should ensure the creation and maintenance of the HSM. The manual serves as a reference to the forecasters during events. It should be easy to use and easily accessible.

Completed HSM should be furnished to the appropriate Regional Headquarters and the servicing RFC(s). Amendments and updates need to be forwarded to all holders of the HSM.

Contents

The following describes what should be included in the HSM, per WSOM Chapter E-24. The HSM should be tailored to the local needs of the office, some sections may be added accordingly.

Section 1. Hydrology Program Personnel

This section should include all personnel assigned to the hydrology program of the office and their primary functions. This would include the MIC, WCM, SOO, SH, HFP, etc..

Section 2. Description of HSA

Maps should be included in this section to describe:

1) the boundaries of HSA and important population centers
2) the rivers of the HSA
3) the forecast points and data points of the HSA

This section should also provide a description of:

1) the difference between HSA and CWFA if there is one
2) the topography of the HSA
3) the climatology of the HSA
4) the floods in the HSA and their seasonal variability
5) the major historical floods

Section 3. Reporting Networks

This section should describe all the data sources in the HSA. This information will be used to solve data problems, to contact appropriate people about data issues, and to look up where to find data. There should be at least two lists:

List of COOP stations with the following information:

- Station name
- Type of data (precip, stage, etc..)
- Observer name, address, and phone number
- Name, address and phone number of person responsible for maintenance
- method of reporting
- latitude/longitude
- NWS location identifier

List of automated collection platforms

- Station name
- type of data
- name, address, and phone number of individual responsible for maintenance
- method of telemetry
- method of data acquisition (telephone line, radio, HADS)
- latitude/longitude
- NWS location identifier
- If the station is part of LFWS

Section 4. Hydrologic Customers

This section should list all the known customers concerned with hydrologic services and what information they are primarily interested in. This would include water management agencies and emergency managers. The list should include names and phone numbers of people to contact.

Sections 5. Hydrologic Forecast Operations

This section should describe the hydrologic products issued by the office, the steps taken to prepare forecasts, when the products are issued, what guidance is used, etc. The role of the supporting RFCs should be explained, as well as the coordination process between WFO and RFC.

Section 6. Procedures for flood and flash flood forecasting
This section should include a description of the guidance products supplied by the RFC, simplified forecast schemes for emergency use, coordination policies, etc.. This would also be a good place to include examples of hydrologic products, when they are issued etc..

Section 7. Appendices
Appendices should include a list of publications about rivers and floods in HSA, and general hydrology, and any other information deemed necessary. Here are a few suggestions:

- Definitions
- WHFS

HSM Tips

Make a table of contents

Use tabs to easily access the desired section

Number pages to make it easier to find what was listed in the table of contents. It also makes it easier to update the manual, and send updated pages to other holders of the HSM

Maps are the best way to describe locations, and a very good reference for the forecasters. Include lots of maps.

Add photos if possible

Include examples of all hydrologic products issued by your office, along with criteria for issuing the products, etc..

The HSM should also contain instructions for Dam failures if they are not available elsewhere.

Get comments/feedback from the forecasters who will use the manual (i.e. is the manual easy for them to use, does it contain all the information they may need, etc..).